REMARKS

Applicants express appreciation to the Examiner for the recent interview granted to applicants' representative. At the interview, proposed amendments to independent method claims 1 and 9 were discussed[1] in reference to the prior art of record. In particular, it was "Discussed whether the Chan reference discloses 'without requiring the programmer to open or interface with the secondary editors', in other words whether the interaction between primary and secondary editors is seamless in the same sense as applicants have claimed, and if Chan did not disclose [this concept], the claims would appear to define over the art of record."

Applicants have amended independent claims 1 and 9 as proposed. Corresponding independent claim 25 and 32 directed to computer program products have similarly been amended as claims 1 and 9. Claims 16 – 24 have been cancelled without prejudice, and dependent claims 4 – 8, 12, 13, 15, 28 – 31, 35 and 36 have been amended in minor respects to provide consistency of terms with the independent claims. Thus, by the paper claims 1 – 15 and 25 – 37 are presented for consideration. The independent claims are method claims 1 and 9, and corresponding computer program product claims 25 and 32.

As discussed at the interview, many editors provide advanced features that can make the programmer's work easier. These advanced features include such things as: syntax coloring, which involves coloring or otherwise altering the elements of a document to distinguish the various elements of the program or markup language syntax; statement completion, which occurs when the editor hints or is able to complete a partially typed expression; and validation, which occurs when the editor is able to detect invalid or obsolete constructs without invoking the actual compiler. However, a problem with editors is that they are not configured to extend their advanced editing features to code segments that are written in different languages, even if those code segments belong to the same file or document. The reason for this is that editors work on the assumption that a programming file or document consists entirely of source code written in a single programming language. This, however, can be a problem when considering the current movement in computer programming. For instance, existing Microsoft ASP.NET technology

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[1] It was noted that independent claims 25 and 32 are directed to computer program products that correspond to the methods of claims 1 and 9, and thus are subject to the same comments and arguments advanced in support of claims 1 and 9.

currently allows Web pages to be developed that include both HTML markup as well as text in a compiler programming language such as Visual Basic or C#.

Applicants' invention solves this problem. As set forth in the independent claims, applicants' invention is directed to a method and a computer program product for implementing a method "for permitting a programmer to edit a multilanguage document having code segments written in a primary language and one or more code segments written in one or more secondary languages, the method permitting the programmer to perform editing of the multilanguage document from a single primary editor designed to provide advanced editing functionality for the primary language, while also enabling the programmer to utilize advanced editing functionality of one or more secondary editors to edit the one or more secondary languages, *and in such a way that the programmer is not required to open or interface with the secondary editors.*" (Emphasis added). The method is defined in the claims (see claims 1 and 25) as comprising a step for "presenting to a programmer a multilanguage document in a primary application view of a primary editor designed to provide advanced editing functionality for the primary language of the multilanguage document," and then a step for "identifying code segments of the multilanguage document that are written in the primary language and identifying at least one other code segment written in a secondary programming language." Lastly, the method requires "*without requiring the programmer to leave the primary application view to open or interface with the secondary editors,* enabling the programmer to edit the different code segments of the multilanguage document *from within the primary application view* by editing code segments written in the primary language with the primary editor, and by sending the at least one other code segment written in secondary programming language to one of the secondary editors so that thereafter, edits made in the primary application view will be performed by the secondary editor *even though the programmer is working on the multilanguage document only in the primary application view.*" (Emphasis added).

Claims 9 and 32 are similar but additionally require "identifying whether the at least one other code segment written in a secondary programming language is a complete code segment, and if not, supplementing the at least one other code segment with additional data necessary to create complete source code for the at least one other code segment so that it can be recognized and edited by the secondary editor for the language of the at least one other code segment," and

then "without requiring the programmer to open or interface with the secondary editors, providing the at least one other code segment to the secondary editor of the language for the at least one other code segment, and the secondary editor thereafter creating a secondary document for editing the at least one other code segment, *the secondary document being invisible to the user in the sense that it is created by the secondary editor without interaction by the programmer outside of the primary editor,*" and then "the primary editor thereafter creating links between the primary application view of the multilanguage document presented in the primary editor, and portions of the secondary document." (Emphasis added).

As presented herein for reconsideration, applicants' claimed method and computer program product is not anticipated or made obvious by the prior art of record, either singly or in combination. Chan generally teaches an integrated development environment for editing multilanguage documents (abstract) but as noted by the Examiner in the Office Action at p. 4 "Chan does not explicitly teach *one or more secondary editors that are each configured to edit code written in a particular programming language.*" (Emphasis in the original). However, the Dreamweaver reference does not teach secondary editors for editing program code in languages other than the primary language of the multilanguage document. As noted at the interview, what Dreamweaver does teach is that if prefers not to use Dreamweaver's HTML editor, one may configure Dreamweaver to use another HTML editor. But note that this is not the same as using a secondary editor to provide editing in a secondary language. It is merely substitution of one primary editor for another. For this reason alone, the references of record do not render applicants' claims obvious.

Moreover and in any event, neither of the references teach "*without requiring the programmer to leave the primary application view to open or interface with the secondary editors*, enabling the programmer to edit the different code segments of the multilanguage document *from within the primary application view* by editing code segments written in the primary language with the primary editor, and by sending the at least one other code segment written in secondary programming language to one of the secondary editors so that thereafter, edits made in the primary application view will be performed by the secondary editor *even though the programmer is working on the multilanguage document only in the primary application view*" (claims 1 and 25, emphasis added), nor is there any suggestion or teaching of

creating a secondary document for editing the at least one other code segment, *the secondary document being invisible to the user in the sense that it is created by the secondary editor without interaction by the programmer outside of the primary editor*," and then "the primary editor thereafter creating links between the primary application view of the multilanguage document presented in the primary editor, and portions of the secondary document." (Claims 9 and 32, emphasis added).
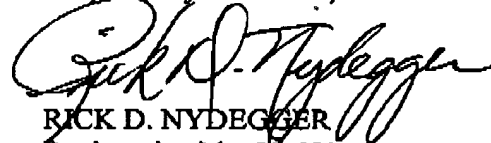
Lastly, the dependent claims (e.g., 8, 13, 19, 24, 31 and 36) which were rejected under section 112 second paragraph for including a trade name ("intellisense") have been amended to delete the trade name and to replace it with the phrase "statement completion." Thus, this rejection is also overcome by the amendments herein.

For at least the foregoing reasons, the claims are patentable over the prior art of record, and thus reconsideration and favorable action are respectfully requested.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 25th day of _April_, 2006.

Respectfully submitted,

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